THERMAL DYNAMICS®

AUTOMATION

Since 1958 PLASMA LEADERSHIP™

1Torch™

with SureLok® Technology

SL100™

One Torch for Virtually Any Plasma Cutting System!

Available With Our ATC™ Quick Change Connector!

Total Plasma Cutting Flexibility

Automated Systems Replacement Plasma Cutting Torch

1Torch™

with SureLok® Technology

Introducing the First Universal Plasma Torch!

The *1Torch*™ RPT torch is the first plasma cutting torch that performs with virtually all plasma cutting power supplies. The 1Torch works with high frequency start systems, CD start systems, touch start systems and moving parts *(blow back)* start systems. Install the 1Torch on your current plasma power supply and you immediately benefit from the latest in high performance torch technology available today.

Important Features Include:

New Phenolic Position Tube

With a new, innovative, easy-to-remove 32 pitch gear rack, the phenolic positioning tube can easily be adapted to any 1-3/8" torch holder. If manual torch position is required, the use of the gear rack will complete the task. Simply remove the gear rack from the positioning tube if not needed.

Precision Engineered Torch Consumable Parts

The 1Torch RPT torch introduces a completely new tip technology. Total gas management is an integral part of the tip design. Each tip is uniquely tuned to optimize cut performance at its rated cutting current, thus there is no longer a requirement for a gas distributor or a swing ring in the torch. The result is precision gas management, longer consumable parts life and better cut performance across the entire range of 1Torch tips.

Extended or Protected Consumable Parts

We designed our consumable parts to adapt to your cutting style. By simply changing the shield cap, you can have either:

- An Extended Tip for greater visibility, improved control and precision cutting at any power level.
- A Protected Tip for improved parts life

New, Improved Leads

1Torch Unshielded Leads on the SL100 mechanized torches are lightweight, extremely flexible and tough – the ideal combination of durability and ease of use. Shielded leads are available for use on dedicated shielded systems.

ATC™ (Advanced Torch Connector) Quick Disconnect Option

Our new quick disconnect design brings extra flexibility to any plasma system. Imagine being able to change out a damaged plasma cutting torch, easily convert from a machine to a hand torch operation, or simply put on a different size torch all in the matter of a few seconds and not have to use any tools to complete the task!

ATC™ Lead Extensions for Improved Versatility

You can add substantial flexibility and versatility to your cutting operations with the use of Lead Extensions. Quick Disconnect Lead Extensions, in 15 ft., 25 ft. and 50 ft. lengths, make it easy and efficient to add or subtract lead length according to the job requirements.

1Torch™ RPT torch and ATC™ connector are patent pending.

©Thermal Dynamics Corp., 2002

1Torch™

with SureLok® Technology

Selecting the Right Torch Package for Your Needs . . .

1 Torch and Leads Selection

Chart 1 (pg. 4) gives you all the information to select the right torch.

Select the following:

- **Torch** – Standard or Shielded
- **Connection** – RPT (O2B) or ATC
- **Lead Length**
- **ATC Lead Extensions** (optional)
- **Remote Control Options**

Note: Lead extensions can only be used with ATC connections.

2 Adapter Kit Selection

Select the appropriate Adapter Kit from Chart 2 (pg. 5). If you selected a torch with the ATC Connection, you will also need an ATC Receptacle Adapter (see Chart 1).

3 Spare Parts Selection

From Chart 3 (pg. 6), select an RPT Spare Parts Kit or specific consumable parts that best suit your cutting requirements.

Torch Connection Options

The diagrams below show the different torch connections with **remote connection options**.

Standard RPT Connection

(Note: Remote control is either 7-3460 Remote Pendant Control or is user supplied.)

A

RPT (O2B) → Torch Adapter Kit → Power Supply

1
Torch Connection → Torch Adapter Kit → Power Supply → Remote Control

2
Torch Connection → Remote Interface Adapter – 7-3452 (included w/ torch) ← Remote Control → Torch Adapter Kit → Power Supply

ATC Torch Connection

(Note: Remote control is either 7-3460 Remote Pendant Control or is user supplied.)

B

ATC → ATC Adapter Kit → Torch Adapter Kit → Power Supply

1 Shielded
ATC Torch Connection → ATC Lead Extension (Optional) → ATC Adapter Kit → Torch Adapter Kit → Power Supply ← Remote Control

2 Standard/Shielded
ATC Torch Connection ← Remote Control → ATC Lead Extension (Optional) → ATC Adapter Kit → Torch Adapter Kit → Power Supply

3 Standard
ATC Torch Connection → ATC Lead Extension (Optional) → ATC Remote Interface Adapter (Cat. #7-3474) ← Remote Control → ATC Adapter Kit → Torch Adapter Kit → Power Supply

4 Standard/Shielded
ATC Torch Connection → ATC Lead Extension (Optional) → ATC Adapter Kit → Remote Interface Adapter – 7-3452 ← Remote Control → Torch Adapter Kit → Power Supply

1Torch™ with SureLok® Technology

Torch and Lead Selection

Listed below are the Torch and Lead selection charts for the SL100™ Machine 1Torch RPT torch.

ORDERING INFORMATION

Machine Torch

SL100™
Medium/Heavy Duty Torch
30-100 Amps

Standard

CAT NO.	DESCRIPTION
A	**Standard RPT** (O2B) **Torch Connection**
	Torch & Leads
	SL100 Machine Torch (Fiberglass Tube w/ Rack)
7-5209	SL100, 180°, 25' (7.6m) Torch/Leads
7-5210	SL100, 180°, 50' (15.2m) Torch/Leads
	Remote Interface Adapter 7-3452 included with torch.
B	**ATC™ Torch Connection**
	Torch & Leads
	SL100 Machine Torch w/ ATC (Fiberglass Tube w/ Rack)
7-5213	SL100, 180°, 5' (1.5m) Torch/Leads
7-5214	SL100, 180°, 10' (3.0m) Torch/Leads
7-5215	SL100, 180°, 25' (7.6m) Torch/Leads
7-5216	SL100, 180°, 50' (15.2m) Torch/Leads
	ATC™ Adapter Kit
	ATC Adapter
7-5207	ATC Receptacle Connector
	* This receptacle adapter is required for each power supply using an ATC torch connection. This is connected to the torch adapter kit specific to each power supply.
	ATC™ Lead Extensions[2]
	Lead Extensions - Standard
7-7544	15' (4.5m) Lead Extension
7-7545	25' (7.6m) Lead Extension
7-7552	50' (15.2m) Lead Extension
	Mechanized Remote Controls
	Remote Interface Connectors
7-3474	ATC Remote Interface Adapter Provides an optional remote interface connection to allow the use of any remote control. Can be placed anywhere between the ATC Torch connection or Lead Extension and ATC Adapter.
7-3452	Remote Pendant Interface Kit Interfaces into any torch adapter kit to allow the use of a Remote Pendant (7-3460) on any Mechanized torch system.
7-3460	Remote Pendant Control
9-5651	25 ft. CNC Remote Cable
9-5652	50 ft. CNC Remote Cable

Shielded[1]

CAT NO.	DESCRIPTION
A	**Standard RPT** (O2B) **Torch Connection**
	Torch & Leads
	SL100 Machine Torch – Shielded (Fiberglass Tube w/ Rack)
7-5211	SL100, 180°, 25' (7.6m) Torch/Leads
7-5212	SL100, 180°, 50' (15.2m) Torch/Leads
	Remote Interface Adapter 7-3452 included with torch.
B	**ATC™ Torch Connection**
	Torch & Leads
	SL100 Machine Torch w/ ATC – Shielded (Fiberglass Tube w/ Rack)
7-5219	SL100', 180°, 5' (1.5m) Torch/Leads
7-5220	SL100', 180°, 10' (3.0m) Torch/Leads
7-5221	SL100', 180°, 25' (7.6m) Torch/Leads
7-5222	SL100', 180°, 50' (15.2m) Torch/Leads
	ATC™ Adapter Kit
	ATC Adapter – Shielded
7-3472	ATC Receptacle Connector
	* This receptacle adapter is required for each power supply using an ATC torch connection. This is connected to the torch adapter kit specific to each power supply.
	ATC™ Lead Extensions[2]
	Lead Extensions - Standard
7-7854	25' (7.6m) Lead Extension
7-7855	50' (15.2m) Lead Extension
	Mechanized Remote Options
	Remote Interface Connectors
7-3452	Remote Pendant Interface Kit Interfaces into any torch adapter kit to allow the use of a Remote Pendant (7-3460) on any Mechanized torch system.
7-3460	Remote Pendant Control
9-5651	25 ft. CNC Remote Cable
9-5652	50 ft. CNC Remote Cable

NOTES: (1) It is only recommended to install shielded torches onto a shielded ready system. Installation onto a non-shielded system may result in reduced performance. Installing a shielded torch on to a shielded system requires the shield connections to be terminated to a proper shield termination or earth ground point.
(2) Lead extensions are available for torches with ATC connections. It is suggested that the total lead length including torch and extension(s) not exceed the maximum lead length specified by the power supply manufacturer.

1Torch™

with SureLok® Technology

Adapter Kit Selection

Listed below is the Adapter Kit selection charts for the Machine 1Torch RPT torch.

2

Torch Adapter Kits

The model of the plasma cutting system must be known to determine the adapter kit required.

Manufacturer Power Supply Model	Catalog Number
AIRCO®/BOC®	
PCS-43	7-3425
PCS-53, PCS-80, PCS-90	7-3435
CEBORA®	
50	7-3438
CENTURY®	
82020*, 82050*	7-3476
DAIHEN®	
SC-60P	7-3432
MRAT-70	7-3437
DAYTON®	
3W722A*, 5Z031B*	7-3476
ESAB® (yellow)	
PCM-SMi, 500i, 625i, PCS-43	7-3425
PCS-53, 80, 90	7-3435
ESP-100i	7-3426
PCM-750i, 875, 1000i, 1125	7-3429
Sidewinder 30, 55, 105	7-3434
Powercut® 650, 875, 1125, 1250, 1500	7-3462
HARRIS®	
System 50, 65, 100	7-3439
HOBART®	
Smoothcut 30, 625	7-3425
Smoothcut 50 (single gas), 100	7-3426
Smoothcut 50 (dual gas)	7-3428
Smoothcut II 35A, 60A, 100A	7-3427
Fab Shop	7-3440
Cybercut 2050*	7-3457
HYPERTHERM®	
Max® 40, HT® 40 (H/F Start) Max® 70, Max® 80, Max® 100 w/wo Q.D.	7-3430
Max® 42*, 43*, 40cs* powermax® 600*, 800*, 900*	7-3454
powermax® 1100*	7-3455
powermax® 1000*, 1250*	7-3461
Max® 40cs* (wo/ Q.D.)	7-3476
powermax® 380*	7-3477
INNERLOGIC®	
SR-45i	7-3451
L TEC® (green)	
PCM-31, SMi, 32i/34i, VPi PCM-500i, 625i, PCS-80i	7-3425
PCM-50A, 70, 80, 52i/54i, 82i/84i ESP-100i, PCM-50, PCM-100 (Single Gas) PCM-50, PCM-100 (Dual Gas)	7-3426
PCS-40	7-3430
PCM-750i, 1000i	7-3435
PCM-101	7-3436

Manufacturer Power Supply Model	Catalog Number
LINCOLN®	
Pro-Cut 60	7-3431
MARQUETTE®	
12/150	7-3476
MATCO®	
2020*, 2050*	7-3476
MILLER®	
Plazcut 60/Zipcut	7-3432
Spectrum® 250D, 500, 750	7-3433
Spectrum® 700, 1000, 1250, PLUS	7-3430
Spectrum® 3080*	7-3456
Spectrum® 650*, 701*, 2050*	7-3457
Spectrum® 300*	7-3476
Spectrum® 375*	7-3477
MULTIQUIP MQ®	
PCX50SS	7-3437
NU-TECSYS®	
Omnicut 375	7-3438
PCA-30/60, 65	7-3441
OTC	
Panasonic D-5000, D-7000	7-3437
P-TRON®	
P-Tron 75, 100	7-3437
POWCON®	
Starcut	7-3430
SMITH®	
SPC-30, 20-50, 40-80	7-3442
SNAP-ON®	
YA-2230*, YA-5550*	7-3476
SOLAR®	
SOL 2020* (118-009, 118-010), SOL 2050* (118-015,118-016)	7-3476
THERMAL DYNAMICS®	
PAK® 3XR, 5XT, 5XR, 6XR, 7XR, 625XR, 750XR	7-3446
PAK® 8XR, 10XR, 1000XR, 1250XR, PakMaster® 75, 100	7-3434
PakMaster® 50XL/XLP, 75XL/XLP, 100XL/XLP CUTMASTER™ 50, 75, 80XL, 100	7-3447
PakMaster® 25, 38XL, EconoPAK® 25 Drag-Gun® 38, PAK® 4Xi, 6Xi PAK® 2XT, Dynapak® 110	7-3443
PakMaster® 50 w/ Smart Torch (Q.D.)	7-3445
EconoPAK® 50	7-3449
EconoPAK® 100	7-3450
PAK® 5	7-3444
PAK® 10	7-3436

*Non-HF Systems.

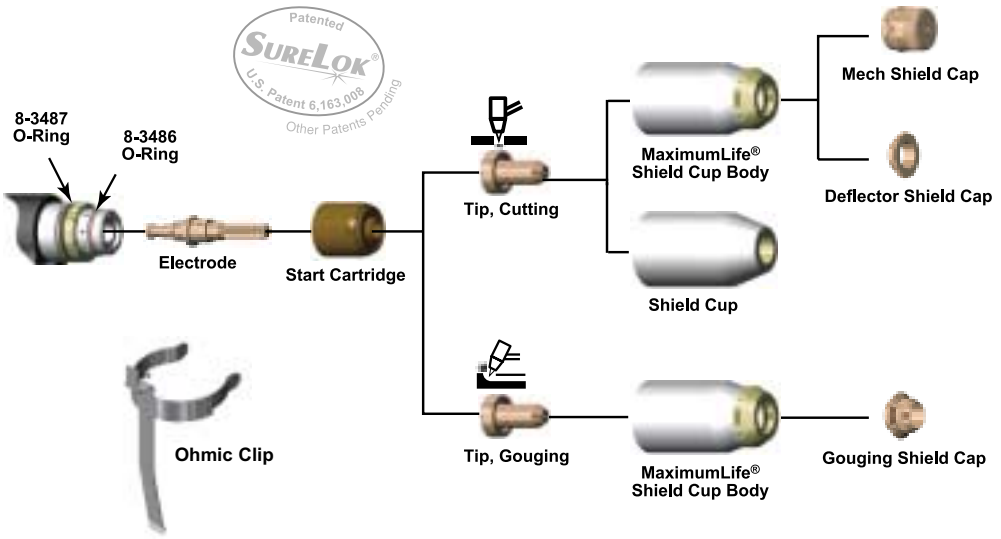
NOTES: Each Adapter Kit includes connection fitting, electrical connectors and installation instruction sheets for the selected power supply.

CEBORA is a registered trademark of Cebora S.p.A.; DAIHEN is a registered trademark of Daihen Inc.; ESAB and L-TEC are registered trademarks of ESAB AB; HARRIS and LINCOLN are registered trademarks of Lincoln Electric Co.; HOBART is a registered trademark of Hobart Brothers Co.; HYPERTHERM, Max and powermax are registered trademarks of Hypertherm, Inc.; MILLER and Spectrum are registered trademarks of Miller Electric Mfg. Co.; MULTIQUIP is a registered trademark of Multiquip, Inc.; NU-TECSYS is a registered trademark of Nu-Tecsys, Inc.; P-TRON is a registered trademark of P-Tron Plasma/Tech Systems; SMITH is a registered trademark of Smith Equipment Co.; INNERLOGIC is a trademark of Innerlogic; THERMAL DYNAMICS, PAK, CUTMASTER, PakMaster, EconoPAK, Dynapak and Drag-Gun are registered trademarks of Thermal Dynamics Corp.

ORDERING INFORMATION

Description	Cat. No.
1TORCH™ CONSUMABLES / PARTS	
O-Ring	8-3487
O-Ring	8-3486
Electrode, MaximumLife®	9-8215
Start Cartridge	9-8213
Tip, 40A, Cutting	9-8208
Tip, 50/55A, Cutting	9-8209
Tip, 60A, Cutting	9-8210
Tip, 70A, Cutting	9-8231
Tip, 80A, Cutting	9-8211
Tip, 90/100A, Cutting	9-8212
Tip, A, (40A) Gouging	9-8225
Tip, B, Gouging	9-8226
Tip, C, Gouging	9-8227
Tip, D, Gouging	9-8228
Shield Cup	9-8218
Shield Cup Body, MaximumLife®	9-8237
Shield Cap, Mach, 50-60A	9-8238
Shield Cap, Mach, 70-100A	9-8239
Shield Cap, Deflector	9-8243
Shield Cap, Gouging	9-8241
Ohmic Clip	9-8224
Spare Parts Kit, 40 Amp	5-2551
Spare Parts Kit, 50/55 Amp	5-2552
Spare Parts Kit, 60 Amp	5-2553
Spare Parts Kit, 70 Amp	5-2554
Spare Parts Kit, 80 Amp	5-2555
Spare Parts Kit, 90/100 Amp	5-2556

SL100™ 1Torch Mechanized Torch Parts



(Note: All Spare Parts Kits include ten (10) Tips, five (5) Electrodes and one (1) Start Cartridge.)

Product Description	Catalog No.
ACCESSORIES	
Single Stage Air Filter	7-7507
Remote Pendant Control, 20 ft. (6.1m)	7-3460
For use with Machine Torch	

Product Description	Catalog No.
ACCESSORIES (cont.)	
Leather Leads Cover	
20 ft. (6.1m)	9-1260
25 ft. (7.6m)	9-1270
50 ft. (15.2m)	9-1280
Straight Line Cutting Guide	7-8911

Product Description	Catalog No.
ACCESSORIES (cont.)	
Cutting Guide Kits	
Circle Guide Kit	7-3291
Roller/ Radius Kit	7-7501
Deluxe Kit	7-8910

WORLD HEADQUARTERS: Suite 300, 16052 Swingley Ridge Road • St. Louis, MO 63017 • 636-728-3000

THERMADYNE®

THERMAL DYNAMICS®

Axson
Svets och Skärspecialisten
S. Långebergsgatan 18 • 421 32 Västra Frölunda
Tel 031-748 52 80 • Fax 031-748 52 81
www.axson.se

© Thermal Dynamics Corp., 2003